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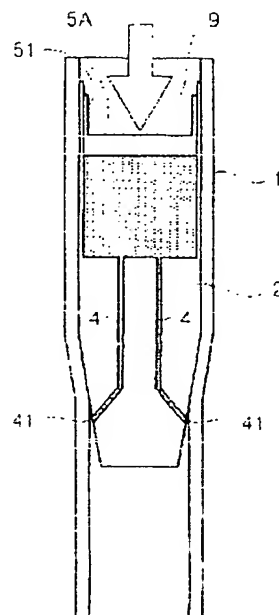
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(54) 【発明の名称】 金属管の拡張方法および拡張工具

【要約】

【課題】 金属管の一端部は硬質型ノックアウト工具により、管内より管内の流体を押し出すことによる拡張作用により、管内に流体が流れるように拡張工具を提供すること。

【解決手段】 拡張工具は、硬質型ノックアウト工具を有し、この拡張工具は、硬質型ノックアウト工具の前端に開口部を設け、この開口部を介して管内の流体を押し出すことによる拡張作用により、管内に流体が流れるように拡張工具を提供すること。



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PD - 2001-02-20

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TI - TUBE EXPANDING METHOD OF METAL TUBE AND TUBE EXPANDING TOOL

IN - INAGAKI SHIGEYUKI;KITO KAZUNARI;HIYAMIZU TAKAO;HORIO KOJI;YAMADA RYUZO

PA - DAIDO STEEL CO LTD

EC - E21B43/10F : E21B43/10F1

IC - B21D39/20

C.V.P.I. DERWENT

TI - Metallic tube expansion method for oil wells, involves supplying lubricant through tube before expansion by expanding tool

PR - JP19990228876 19990812

PN - JP2001047161 A 20010220 DW200126 B21D39/20 004pp

PA - (DAIZ ) DAIDO TOKUSHUKO KK

IC - B21D39/20

AB - JP2001047161 NOVELTY - The method involves supplying the lubricant through the metallic tube (1), before expansion by the expansion tool (2).

- DETAILED DESCRIPTION - The common ball type expansion tool (2) is inserted into the metallic tube (1). The internal diameter of the tube is expanded by the pressure of hydrolyic fluid from the rear side of the tool. An INDEPENDENT CLAIM is also included for tube widening tool.

- USE - For casing tube, telescopic tube, coiled tubes in oil well, gas well, refinery.

- ADVANTAGE - The expansion work is executed smoothly and continuously.

- DESCRIPTION OF DRAWING(S) - The figure shows the sectional elevation of tube expansion tool.

- Metallic tube 1

- Expansion tool 2

- (Dwg.2/5)

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AN - 2001-252189 [26]

C.P.A.S. JPC

PN - JP2001047161 A 20010220

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IN - HIYAMIZU TAKAO;HORIO KOJI;KITO KAZUNARI;INAGAKI SHIGEYUKI;YAMADA RYUZO

PA - DAIDO STEEL CO LTD

TI - TUBE EXPANDING METHOD OF METAL TUBE AND TUBE EXPANDING TOOL

AB - PROBLEM TO BE SOLVED: To expand a metal tube having a length of several-hundred meters or more in a tube expanding technology by which a bullet shaped tube expanding tool is inserted into the inside of the metal tube, a fluid pressure is applied from rear side and an inner diameter of the tube is expanded by advancing the tool.

- SOLUTION: A tube expanding tool, which has a lubricant tank at a rear part, is arranged with a lubricant conduit tube 4 extending from a bottom of the lubricant tank and opening to a tapered face at the front part and is arranged with a pressure transfer means to receive/transfer a fluid pressure to the lubricant in the lubricant tank, is used. the tube expanding tool is advanced while continuously and uniformly supplying the lubricant to a tube inner wall part immediately before tube expanding.

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